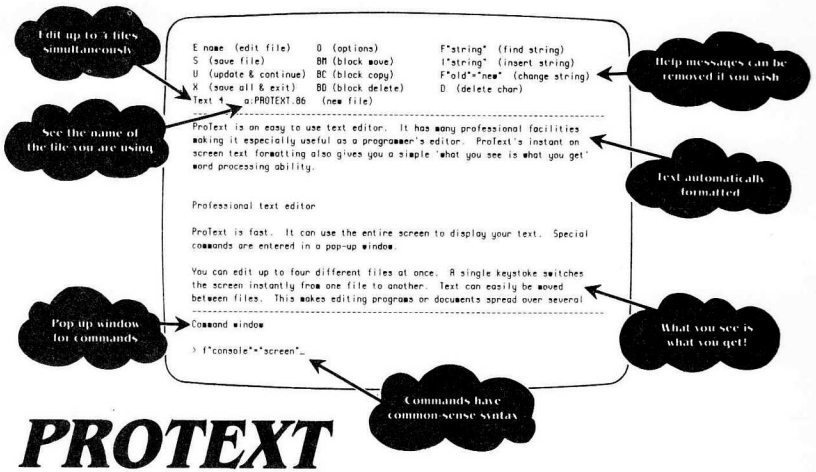
RM User

Vol. 2 No. 1 January 1987

The Journal of the RM User Group


Edit up to 4 files simultaneously
See the name of the file you are using
Pop up window for commands
Commands have common-sense syntax
Help messages can be removed if you wish
Text automatically formatted
What you see is what you get!
E name (edit file) O (options) F"string" (find string)
S (save file) BM (block move) I"string" (insert string)
U (update & continue) BC (block copy) F"old"="new" (change string)
X (save all & exit) BD (block delete) D (delete char)
Text 4 a:PROTEXT.86 (new file)
ProText is an easy to use text editor. It has many professional facilities making it especially useful as a programmer's editor. ProText's instant on screen text formatting also gives you a simple 'what you see is what you get' word processing ability.
Professional text editor
ProText is fast. It can use the entire screen to display your text. Special commands are entered in a pop-up window.
You can edit up to four different files at once. A single keystroke switches the screen instantly from one file to another. Text can easily be moved between files. This makes editing programs or documents spread over several
Command window
> f"console"+"screen"_

PROTEXT

ProText is an easy to use text editor. It has many professional facilities making it especially useful as a programmer's editor.

- Can use the entire screen to display your text. Special commands are entered in a pop-up window.
- Edit up to four different files **at once.** Text can easily be moved between files. This makes editing programs or documents spread over several files a dream come true!
- Deleted characters, words and lines of text are remembered in a buffer and can be instantly recovered. Up to **500 items** of text can be recovered in this way.
- Disk file handling features Update-and-continue for safety. Revert to last version, and Abandon file, as well as the usual facilities.
- Selectable case distinction when Finding text, intelligent Replace command and variable Tab spacing. Many of ProText's features are configurable to your own needs.

If you have been using TXED for program development, you will appreciate ProText's sensible design and flexibility.

480Z £15, 480Z Network £39 + VAT

SPA

P.O. Box 59
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Contents

Editorial 1
Blunders 2
Writing for *RM User* 2
News Round-up 3
Library News 5

Software Reviews

DIALUP Comunications package 9
NIMBUS viewdata 15
SPA'S VIEW 19
WORDSTAR & MULTIPLAN training material 21
MUDDLES 25

User Group Meetings

The Weekend Conference 27
Day Meeting at ILECC 31

Hardware

Modifying 480Z drives to work with NIMBUS 32

Using your NIMBUS

WINDOWS 37
NIMBUS Case History by *Leading Edge* 44
WRITE for the NIMBUS (and 3/480Z) 47

480Z and Education
Modifying *Touch n Go* 49
Writing Adventure Games in Logo 52
Excellent MEP software at bargain prices 55
START – a network menu program in TCL PASCALt 56

MicroMart 59

Membership Form 61

Advertisers' Index

MSM . . . . . Back Cover
Software Production Associates . . . . . Inside Front Cover
Peter Whittle Systems 14, 18
Peter Bishop Associates 30
PMS 8
Methodist College Belfast 46
Executive Committee . . . . . Inside Back Cover

Remember: You can reach us on BTGOLD 72:MAG 90380

Editorial

Well, the news is out – or will officially be at the *Which Computer? Show* at the National Exhibition Centre on Tuesday, 17th February. The news I'm talking about is RM's new machine.

This new baby is really an IBM clone that is also a NIMBUS. Essentially the new machine will run all of your existing NIMBUS stuff but its new ROMS enable it to run IBM software as it comes. Those of you who are into the bits and pieces of IBM clonery will now that it's all about trapping software calls which are looking for IBM hardware. That's why LOTUS 123 has to be supplied with a nifty little piece of software called *SoftClone* which fools LOTUS 123 that it's actually running on an IBM machine.

This need for IBM compatibility is really a sorry state of affairs as almost any clone does a better job of being an IBM machine than any IBM machine. However, that's the current industry standard. RM is in the business of selling micros to whoever will buy them – as the *RM User Group* is in the business of supporting all users – and if business users can't run their IBM software on a NIMBUS they will, and do, go elsewhere. We know that the current NIMBUS is a superb micro and this new one will just enhance RM's position – I hope.

If you can get along to the show at the NEC, please do. Free tickets are pretty easy to find and you will probably see some actually printed in copies of the quality day and Sunday newspapers in the week preceeding the show. Otherwise it's a fiver at the door.

RM are a powerful force in the UK micro scene. In the last published *Top Ten* of 16-bit micro sales OLIVETTI came number two with 7,000 units to IBM's number one. However, because RM don't basically sell through dealers, their sales of 11,000 units didn't appear as number two, pushing OLIVETTI down a place. Of course, apart from anything else, the new machine is needed to fight off competition from AMSTRAD.

May I encourage all members to send contributions in to the Journal. Do use the email facilities of TTNS and BT GOLD for articles, letters and requests for help. We're on **72:MAG90380**. The mailbox is checked daily and is already proving very useful.

At the time of writing (January 11th) the plans for the AGM in April and the weekend conference in the autumn are well underway and you will receive separate details. Do come to both. The AGM day meeting (of which the AGM

promises to be a very small part) will be, we hope, about **Desktop Publishing**.

Finally, users of *PC PaintBrush* will be glad to know that RM has copies of the 2nd edition of the manual. They're not all that keen to hand these out as they had a 1000 of the first edition printed in error! However, be persistent. Ring Sales.

Blunders

In the last issue of *Read Using* (which is why we're changing the name!) there were some unfortunate errors in the Screen Configuration program.

These included a section printed twice, odd characters omitted and some program lines omitted.

The correct, working program is in the User Group Library, but if you require a perfectly correct printed version please write to me and I can arrange for you to be supplied with same.

Writing for RM User

First of all, please do! We need all sorts of material for the whole range of RM machines.

Especially welcome are articles about the NIMBUS, business and commercial use of RM's machines and software.

If you have problems, let us know. Ring any number listed with the committee or email us on BTGOLD 72-MAG90380.

If at all possible, send your contributions in on disk. All are eventually returned. **Please, please** do not use TAB in you word-processing activities! Use the spacebar instead. If you've an idea for an article but aren't sure about it, give me a ring.

All contributors are entitled to a free Library volume. We are **not** now paying by the page. Payments, where we can afford it (!) are being made especially to commissioned reviews and are also being related to the Editor's assessment of the weight and size of the article. Sorry if that sounds a little pompous. We are trying be economical with our advertising revenue.

Copy deadline for the next *RM User* is by the end of February. We hope to publish the next issue late March/early April.

News from the RM world

The NIMBUS goes from strength to strength, as they say! One of the most interesting items to come out of Mill Street has been the Autumn Educational Catalogue. To label it "Educational" is to imply much less than it actually is, for this catalogue has as much for the commercial and business user as those in any branch of education. It complements and expands the NIMBUS catalogue issued in June of 1986.

LOTUS 123 was released for NIMBUS at advantageous prices for educational users. It seems that business training establishments could be regarded as educational establishments, but check with RM first! There will be a review of LOTUS 123 in the next issue of *RM User*.

Also released in the Autumn were the valuable extensions to RM LOGO for NIMBUS. You only need this upgrade if you received LOGO before August, 1986. It cost £9.

Apart from hardware price reductions for educational purchasers mentioned in the last issue of the Journal, RM announced a number of software price reductions and changes which were effective in the October/December period. They are *briefly* detailed as follows:

> STEED, QUEST 16, PRO PASCAL Graphics and RM CAD are all reduced to £25 per site. TOUCH N GO for non-educational users has been reduced top £50 per 16 network stations.
>
> PC PAINTBRUSH has been reduced to £25 for stand-alone; £75 for networks (per 16) and a s/a to n/w upgrade is now £50. Pictures from PC PAINTBRUSH can be incorporated by ALDUS PAGEMAKER into documents.

For the commercial and business user, price reductions on WORD and MULTIPLAN represent major savings. Note that it isn't worth buying an AMSTRAD clone if decent software is going to cost an arm and a leg. For both education and non-education stand-alone users, WORD now costs just £69! The same price applies to MULTIPLAN. If you are a network user an 8 station n/w or site version now costs only £499 for both programs.

RM is now shipping the world's best-selling CAD package, AUTOCAD. It costs £500 for educational users. *However*, you must have various extras. On a s/a

machines you need a hard disk; DCC board; 4-way IO bus cable; 1024K RAM and an 8087 processor. A network station must be a PCN1. Full details from the Sales Desk at RM.

The release of BBC BASIC caused many smiles, I suspect. It makes a fine job of running the toy's programs, costs £49 for s/a and £99 for n/w (16). A full data sheet is available from the Sales Desk.

October saw BBC BASIC and a comms package put into the network software bundle and the full version of SUPERFILE taken out. That has been replaced by an evaluation system with a 16K data file size restriction. RM are not now bundling a full database with the network. BRAINSTORM is not now being sold by RM but is available for NIMBUS directly from Caxton Software.

Those into FORTRAN can obtain a NIMBUS version of the NAG PC50 library for £240 (s/a) from NAG Central Office. They're on Oxford (0865) 511245.

WINDOWS DRAW is dowm by £50 to £149.

A most useful item now available for NIMBUS users could be the *Techpacks*. These are **unsupported** disks costing £9 and contain a variety of exciting bits and pieces from TURBO PASCAL graphics to sound and speech software. You may wish to contact Jeremy Walsh at Tech Support.

For those in school admin looking for the ultimate and complete solutions you might wish to try the *Bursar's Clerk* schools management system from *CSM Software Ltd.* The suite of programs is written in the high level language SENSIBLE SOLUTION. No, I haven't heard of it, either! Details from RM or CSM on 064 383 505. It's not cheap.

Available from December are two natty little programs for NIMBUS called ANALYSER I and ANALYSER II. ANALYSER is a teaching aid for analogue electronic circuit design. ANALYSER I costs £65 and is a teaching version. The full ANALYSER II costs £195. Details from the Sales Desk.

Due for release any time is Network Release 2. This is a major enhancement to the NIMBUS network software and will make it very much easier for network managers and users. This was seen running at the User Group Weekend and at the Day Meeting on Communications in November at ILECC. Again, details from the Sales Desk.

Library News.

from John Ward

(ol' 8-bit)

The library has lots of free software grouped on disks each of which is called a volume. You may get an up to date list of the library's contents by sending for volume 0. This volume also contains a program, FIND, to help you find what you want. The FIND program may also be useful elsewhere as it can search files for the occurrence of a given text string. To obtain library volumes you should send your membership number (on the envelope the magazine comes in) and £1.50 per volume to the librarian – address inside front (or back) cover. If you don't send a *formatted single density* double sided disk then please add £1.50 (Nimbus and 8" users £2.50) per volume. Make cheques payable to the Research Machines National User Group and cash with order please. If you want 10 or 20 volumes then I will accept an LEA order but *please* don't send these for small quantities.

To quote Basil Fawlty, "For the first time in my life I'm ahead". In my case this means that I am writing this before the last magazine has appeared. This I've never managed to do before. Anyway, since it's mainly a NIMBUS issue there will not be so much for old stagers like me who only have 380Z's. (No not even 480Z's. And I bought another old 380Z last month from an advert in this magazine.)

Volume 21 of 8-bit software is released and its catalogue appears at the end. Let me explain what the utilities in this volume do. NULU.COM stands for new Library Utility. This is a replacement for LU.COM (volume 14). NULU is smaller, faster and has more features than LU. It has a sweep mode which does for libraries what NSWP does for directories. NULU can be instructed to unsqueeze files (if necessary) when extracting them from libraries. This saves unsqueezing them later. e.g. NULU-O WOOD -Q *.*<cr> "opens" WOOD.LBR, extracts all files onto the logged-on disk unsqueezing if necessary and exits. The document describing NULU is very thorough and the COM file is customized for 3/480Z.

Those of you who have just had your first 'phone bill since you got your modem working will realize the importance of compressing files before sending them over BT's lines. NSWP (volume 14) can be used to squeeze (and unsqueeze) files and this will typically reduce a text file to about 2/3. The squeezing method uses the Huffman algorithm which was simply described in May Byte page 98. (Good for teaching this article?) A newer data compression method is the Lempel, Zev,

Welch (LZW) algorithm. The CRUNCH.COM and UNCR.COM utilities use this method and will typically reduce a text file to about 1/2. "Crunched" files have the middle letter of the filename extension changed to a Z, e.g. NULU.DZC. Command syntax is CRUNCH filename<cr> and UNCR filename<cr>. ZTYPELZ.COM will enable you to "type" a file squeezed/crunched or not even if it is in a library. (It replaces TYPEL in volume 14 although it cannot output to printer as can that program. Note that it is only half as big despite being able to deal with crunched files as well!.) Syntax is ZTYPELZ [libfilename] filename<cr>. (The bit in is optional.)

TYPO is a utility for finding typing errors i.e. "typos'. It will advise on nonsense or floating punctuation, odd capitalization, repeated and nonsense words and floating letters. e.g. it would have a field day with "the ma{n s jumped into the the riVer." Quite useful for incompetent typists like me as is the last program on volume 21 SPELL – a spelling checker. I doubt that it is as good as The WORD+ which I use but then it is free. I have not tried it myself but I hope I will be able to tempt the Editor to try it and make some comments when I send him a copy.

Volume 22 is well on the way to being released and it contains mainly contributions from readers. Roy Wood from the Paulet School in Burton in Trent has sent in a whole pile of programs and Ken Maynard has donated the programs he described in his article on adding routines to BASIC in *Read Using* 16 page 42.

The first Nimbus volume is still not quite full. The screen configuration program, SC, referred to last issue is included but we need about another 50 Kbytes worth to fill the disk. Come on NIMBUS owners.

I've be experimenting with modems and modem software. I have a lovely program for 380Z for Hayes compatible modems that keeps a 'phone list, dials for you (until it gets through!), is a terminal emulator with logging to disk and/or printer, has file transfer protocols and can be driven from a command file completely without operator intervention. And that is not all. It is called MEX for Modem Executive. Watch this space!

Now for the really *Big Announcement*. What use do you think would be made of a Library dial-up facility? (Remote Bulletin Board System or RBBS.) I envisage that members will be able to call up the Library, browse through the new (and old) software, download what they want, upload contributions or even articles for the magazine. And, if that is not enough they could send/receive messages for/from other members. Read December 85 Byte page 93 for a fuller description of what might be possible. What I need to know at this stage is what use members think this facility might be. So deluge me with letters that don't need a reply and tell me what you think. It would be a pity to set up a User Group RBBS just so that Robin could download this column.

P.S. Am I alone in thinking that the "simple program" in *Read Using* 17 page 85 will not work?

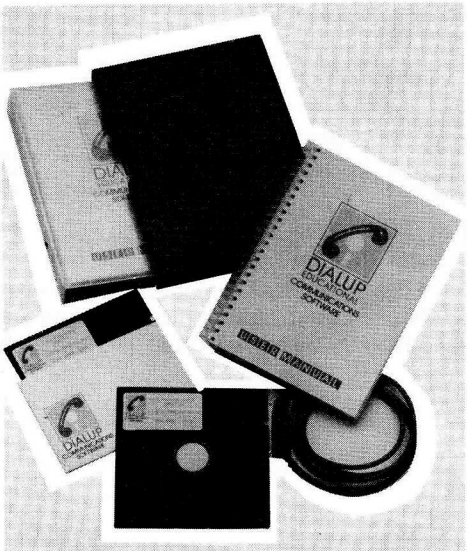
```
RMNUGL Volume 21.

       -CATALOG.R21    This file.
       CRCK    .COM    Checksum program.
       CRCKLIST.R21    Checksums of RMNUGLIB volume 21.

21.01 CRUNCH  .COM   2K  File compression utility
21.02 CR/UNCR .DZC   2K  "crunched" documentation on CRUNCH and UNCR
21.03 NULU    .COM  15K  Library utility - replaces 14.09
21.04 NULU    .DZC  28K  "crunched" documentation on NULU
21.05 SPELL   .LBR  70K  Spelling checker
21.06 TYPO    .LBR  12K  Checks files for "typos" - typing errors
21.07 UNCR    .COM   2K  File decompression utility
21.08 ZTYPELZ .COM   2K  "Types" squeezed or crunched files/library files
```

UNCR filename<cr> will unsqueeze the file(s) specified by filename onto the logged on disk. The input file may therefore be on a different drive if there is not enough room for both the crunched and uncrunched file on one drive.

DIALUP
EDUCATIONAL
COMMUNICATIONS SOFTWARE



COMMUNICATION IN ACTION

DIALUP Educational is a communications software package that has been specifically designed to meet the needs of schools, colleges and educational support organisations. It can be used to access popular educational services such as TTNS and Prestel Education, for electronic mail and file transfer.

MAIN BENEFITS

- easy to use (menu driven)
- clear menu layout
- FREE tutorial disc
- can access all major schools services
- VIEWDATA and ASCII/TTY emulation
- XMODEM and KERMIT file transfer protocol
- CET telesoftware
- multistream EPAD support
- comms cable INCLUDED in the package
- available on 99% of micros used in schools
- compatible with any manual dial modem and a wide range of autodial modems
- DIALUP Educational together with a schools modem (if required) is available at a special 'TOTAL PACKAGE' price.

AVAILABLE FOR

- BBC Models B, B+, Master & Compact
- RML 380Z, 480Z and Nimbus
- Amstrad PC
- IBM PC/XT and IBM Capatibles
- Apricot PC/Xi

FURTHER INFORMATION
Educational Sales,
PMS Communications Ltd,
Norfolk House,
Smallbrook Queensway,
BIRMINGHAM B5 4LJ.
TEL: 021-643 7688.

TELEX: 265871 MONREF G,
Quoting Ref: WQQ214.

MAILBOX NUMBERS:
Prestel: 216437688
BT Gold: 87: WQQ214
Easylink: 19025180

DIALUP
A Communications Package and Program

by Robin Davies

With the growing interest in communications – as evidenced by the excellent level of attendance at the User Group Day on Communications at ILECC in November – comes the need for effective hardware and software with which to communicate.

DIALUP, from *PMS Communications Limited*, has recently been released for a wide variety of computers including the complete RM range, as well as the BBC range, the AMSTRAD PC1512, the IBM PC/XT and the APRICOT PC/Xi. It costs £92.90, including VAT and p&p.

PMS offer a software package and a modem/software package. The latter is in conjunction with MIRACLE TECHNOLOGY and features their *Schools Modem* with the PMS software. I'll come back to the modem side of things later.

The PMS software package is machine specific and can only be used for communications with the dongle provided. This means that if you have a 380Z, a 480Z and a NIMBUS in your establishment with which you wish to use your 3 DTI modems, you must buy 3 separate software packages. In case you think that's unlikely, I know of one school that has **five** DTI modems! The first dongles supplied were modem specific as well – designed for use with the Schools Modem. However, dongles supplied from the middle of January will be modem independent. This will mean that you can use your DTI modem with DIALUP.

Anyway, back to reality. When you've sent off your pennies, what do you get? Well, assuming that you'll be using DIALUP with your DTI modem, you receive a manual, program disk, tutorial disk and modem/computer connecting cable with in-built dongle. The manual/disks are packaged in a neat, robust slip case. With the package comes a licensing agreement and registration card. This latter item could be of some importance for any user as it details the range of support offered by PMS to purchasers, including telephone and email support via DIALINK.

The manual is divided into two main sections. Part One is a General Introduction and Part Two deals with the use of DIALUP.

The General Introduction – in four parts – explains the philosophy behind DIALUP and goes on to give some fairly detailed information about data communications, communications fundamentals and various problems the user might meet.

Part Two – Using DIALUP – in seven sections, takes the user through everything from registration to various utilities supplied as part of the software. On the way you will meet sections concerned with your particular hardware; using DIALUP off-line and on-line; file transer and most of the bits and pieces the average beginner to data communications is likely to need to know.

Six appendices are provided, which cover Error Messages, a Glossary of Terms, Modems supported and other worthy points.

The manual is printed to a high standard and clearly laid out. It is a little dull, with few illustrations. Those that exist are clear and to the point. However, it does remind me of RM manuals. Colour would be helpful. Some educational users I know would find the rather dry approach a little daunting.

There is, rather surprisingly, no index, but the table of contents is quite detailed.

I think it's fair to say that the manual assumes some familiarity with the computer on which you are going to use DIALUP, but no familiarity with data communications. As with all manuals, the time and effort required to read all the instructions carefully is readily repaid by fewer errors and problems in getting things to work!

The section entitled *Getting Started* gives specific instructions for all the machines upon which DIALUP can be used, where specific instructions are used. You need, of course, access to a telephone point with one of BT's new sockets. How you actually go about connecting your modem to the telephone circuit will vary. The DTI modem I have (Tandata Tm 512) is connected in a slightly different way to, for example, the Schools Modem. I found it necessary to buy an extension cable for my telephone with a plug on one end and a socket on the other. Getting hold of one of these is easy enough. £4.99 from Tandy or probably cheaper at an electronic's shop, Maplin shop or your local market.

I mentioned above that I'd come back to modems. PMS offer a package deal with MIRACLE TECHNOLOGY which puts together the latter's School Modem and the DIALUP software for £265.45 which includes VAT and p&p. The modem is auto-dial and auto-answer and offers full HAYES compatibility. Full *what*, I hear you cry! Well, in the same way that IBM compatibility is to 16-bit micros, HAYES compatibility is to modems. It's an internationally accepted standard way in which modems should work, comes out of America and just has to be followed. Naturally, the DTI modems are **not** HAYES compatible! The question of Hayes compatibility is worthy of an article itself.

The Schools Modem is a pleasantly styled little box and can be expensively up-

graded to offer faster data transfer speeds should you wish. I wouldn't bother buying one as I can use the DTI one for free and in any case, faster modems are dropping in price very quickly. 1200 baud full duplex modems are already around at under £250 (plus VAT) and will drop below £200 before the end of the year. When BT has gone fully digital over the next 5 years, only a fool would transmit data at 300 baud when 14K baud (ie bits per second) will be possible and reliable.

Using DIALUP on-line

Thereby hangs my first problem with DIALUP. When you haven't connected the modem properly – or not even switched in on – DIALUP will give you a helpful error message. That's okay in itself, but you must then exit from DIALUP and start again. I find that irritating and time-wasting. What is needed is to just ESC back to the main menu. If you're using DIALUP on any CP/M machine you can use GO.COM to restart and save time. Mind you, using DIALUP presupposes that you have defined the services you wish to use beforehand. This is clearly and very comprehensively covered in the manual under section 7.

When you define a service you are asked to work your way through a service definition screen. At this point, I would urge to read the manual carefully and follow the instructions! I missed a couple of points to start with and had to start again!

This service definition facility presupposes that you have already found out the basic facts about the service to which you wish to connect. You need to know the baud rates at which you service operates, its full telephone number, format and protocol. Each service may be different, so some research is needed. If you don't know what this jargon means the DIALUP manual explains it all quite well.

The service definition enables you to define a logon sequence. This facility is extremely useful and works very well. What is a logon sequence, I hear you cry! Well, when you connect – or logon – to a data communications service such as BT GOLD, PRESTEL or DIALOG it is necessary to gain access to the service. For DIALOG or MICROLINK (part of BT GOLD) you have to enter a Network User Identity (12 characters), a Network User Address (10 characters), a User Number and a Password (another 15-20 characters). All this can become very tiresome and can be built into the logon sequence so that DIALUP does the job for you, saving a lot of hassle. Below is my logon sequence for gaining access to DIALOG. I have included a false User name and Password.

First I dial my local PSS pad – 021-214-5139

<RETURN>
A2
<RETURN> *this logs me on to* PSS and I see:

NUI? *is the request for my Network User Identity*

NDIALOG006OSQ <RETURN> *then I see:*

ADD? *the Network Address of my data service*

A212300120 <RETURN>

This connects me to DIALOG and I would then see:

Please Logon: 12345 *I enter my User Number*

Enter Password: A12BCDEF *I enter my Password*

As you can see, 40 key-strokes after dialling a 10-figure telephone number! To have it all done for you is *very* pleasant.

The DIALUP manual quite correctly warns you against including passwords, etc., in the logon sequence. However, if you are using your own DIALUP disk, say at school/business or home then you could do what I've illustrated above. But be careful!

There's probably no point in me working step by step through all that the DIALUP manual covers in matters relating to going on-line. The manual is thorough and seems to cover most eventualities. I have been able to use DIALUP successfully for email, both receiving and sending messages. Using one of the three methods of file transfer has not been something I've had a real chance to try out.

As part of the package a tutorial/training disk is provided. This covers the following topics:

Communications fundamentals
Use of DIALUP
Accessing MEGLINK
Accessing PRESTEL EDUCATION
Accessing NERIS
Accessing TTNS

For those outside the Midlands, MEGLINK is a facility which will enable schools, etc., who will be using the Midlands Examining Group for GCSE entry to use DIALUP to download all their entries to MEG over the telephone system.

As a concept, a tutorial disk in this area is a good idea. Quite clearly, a lot of thought has been put into the tutorials but I feel that it represents the weakest part of the package.

All the material presented is text, it's all monochrome and frankly, rather dull. A teacher new to data communications might find it helpful, a class would go to sleep. What is needed is some colour and examples showing the reality of the

services mentioned above. This is one part of the package which will need considerable development and input from experienced teachers. I have the impression that PMS feel the tutorial material could be used in a classroom situation. I can't see that happening yet, although an improved version would be useful.

Conclusions

I've been using DIALUP EDUCATIONAL for a month now to access a variety of services. I really like the package. What would be good would be to have a look at DIALUP PERSONAL, DIALUP COMMERCIAL and DIALUP PROFESSIONAL as they appear during 1987.

Weak spots? Of course, there are always some. One's own needs dictate a dislike of some features in any comms package, but I can only find a few in DIALUP. I would like the software to default to *Echo to File*, rather than me having to remember to do that each time. After a failed attempt because I haven't connected the modem properly, I'd like to ESC back to the main menu rather than completely out of DIALUP. The demonstration VIEWDATA frames on the DIALUP disk – and the Tutorial disk need colour. The manual fails to point out that *Echo to Printer* demands that your printer is connected to the parallel port of your micro.

Apart from those points – which have been communicated to PMS and noted with sympathetic understanding – DIALUP is an excellent buy and is fully recommended.

Price List — Education November 1986

Whittle Systems

Turbo Charge your Nimbus New Low Prices

SI-TURBO	—511k Silicon Disk driver software	**£25**
WS20 XW	—20 Megabyte external Nimbus Winchester	**£799**
WS20 FW	—20 Megabyte external Nimbus Winchester with 5.25 inch floppy disk drive	**£994**
WS40 XW	—40 Megabyte external Nimbus Winchester	**£1495**

Nimbus Viewdata

NVD-DISPLAY	—Nimbus VIEWDATA display & terminal emulator	**£49.95**
EXAMPLES 1	—EXAMPLE database	**£15**
NVD-TUTOR	—Editing tutorial database	**£25**
NVD-EDITOR	—Nimbus local VIEWDATA SYSTEM *(includes NVD-DISPLAY and NVD-TUTOR Database)*	**£95**
TRAPDOOR	—The ultimate debugging aid	**£49.95**
ZEM	—Z80 CP/M Emulator	**£49.95**
CP/M 80 Programmer's Guide by Morrell & Whittle		**£8.95**

Network prices of software

Up to 8 stations	@ 3 × standalone price
Up to 16 stations	@ 4 × standalone price
Up to 24 stations	@ 5 × standalone price
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Whittle Systems' NIMBUS VIEWDATA

by Stephen Rochford

Many people will by now have used a viewdata system so these comments attempt to answer the question "Why NVD?" NVD's display package is good but probably offers no functions that any other competent program would offer. I have not used it to dial up (for example) PRESTEL (because RM don't seem to want to sell me a serial Piconet module and I don't have a lead to connect suitable for connecting the modem to the aux socket) but otherwise it is good; the display is clear and quickly updated, (no awful dithering or flashing!), as you would expect on the NIMBUS.

The display program allows you to set up certain pages as 'soft pages'; for example in 480Z MICROVIEWDATA going to page 950 actually dials PRESTEL. You can set a series of pages to do whatever you want; for example dialling up other remote services. Unfortunately this did not seem to be fully implemented on the version that I used so I cannot really say how well it works.

The real advantages of NVD come when you are using the editor package.I first used VIEWDATA on a BBC computer and have used a number of good packages, in particular Cloud Nine which is produced by the London Borough of Ealing. The BBC is ideally suited to this sort of system because it generates the display in hardware and so it is fast and leaves a sensible amount of memory available for the program.

When MICROVIEWDATA was released for the 480Z I was initially impressed, partly because the 480Z does not support teletext style graphics in hardware and also because the editor was easy to learn. After a while, however, the limitations of the dithered colours and the memory shortage on the 480Z (which means that you are constantly loading new sections of the program and on a network this is no joke!) became too much and I went back to using a BBC.

NIMBUS gets round many of these problems. Firstly it does suport the full range of colours and can draw the screen acceptably fast and secondly there is plenty of

memory for all the editor functions to be contained in memory at the same time. The editor package will be immediately useable by anyone who has used MICROVIEWDATA as many of the keys have the same functions and the others are easy to learn. NVD uses keys F1 to F4 to access a series of menus; eg F1 gives text colour control codes. These menus are presented at the bottom of the screen and are reasonably self explanatory.

In case you forget which function key leads to which menu these are also listed on screen. Some extra features have been added since MICROVIEWDATA It is possible on some packages for you to define the direction in which cursor movement takes place. For example if you wan to put a row of red graphic codes down the edge of the screen then you set cursor movement to be down and just press the appropriate key and the cursor moves down ready for the next code; none of the F1 1 left down process of the 480Z. NVD does not allow this but does allow you to set up a cursor which can vary in height from one line to the height of the screen. When you type now the character is repeated for the height of the cursor.

Another plus is the provision of jumbo characters. Put graphics codes down the side of the screen (using your big cursor), go into jumbo mode and start typing; you now get letters three times the width and height of normal letters! Excellent for occasional headings. If you want you can make the jumbo letters multi coloured. There are also several fonts available for jumbo writing; press *SHIFT/ F1* and then a number and new font data is loaded (this is an undocumented feature!)

The windowing works as on the 480Z (allowing you to define a window which can be cut from one frame and either moved elsewhere on the same frame or copied to another frame or elsewhere on the same frame) only it is faster and there is an excellent undo function which copes with up to the last three changes you have made to the screen. It works cyclically so that on the fourtth press of the key you get back where you started from. Undo also allows you to 'mark' a screen for later retrieval. this means that when you get a screen that you think you like you mark it. If further experimentation messes it up then you can simply retrieve the marked version.

To help with laying out the screen you can use a cross wire cursor which extends for the full height and width of the screen and you can also display a grid showing each character position. Turning this on, however, slows things down because the grid is undrawn and redrawn before and after every cursor move.

If you are familiar with standard control codes for VIEWDATA then you can enter them directly without using the menus; e.g. ESC A gives red text. This isn't really that much easier than pressing F1 1 and is certainly harder to learn (because pressing F1 puts a menu on the screen showing which key you can press next; pressing ESC does not).

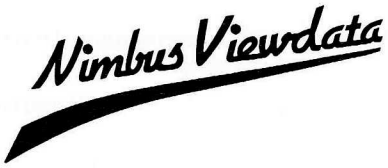
Finally, some niggles. In jumbo mode the cursor moves three spaces to the right after a letter is pressed, as it should, but delete only moves one space to the left making it harder to correct mistakes. Also in jumbo mode the cursor keys only move the cursor one position at a time. When I keep my finger down the cursor doesn't keep up with me and I get lost. I know that I could use the TAB key for big moves (incidentally back tab is implemented with SHIFT TAB) or te PgUp/PgDn keys but. . .

In summary then, the package is good. It comes with a series of tutorial frames, to get you used to editing together with a fun demo database.

Whittle Systems will be running a host system from mid January on OXFORD (0865) 714312.
Incidentally, this is the first Journal material to be sent via the email facilities of BT Gold/Microlink. It took 5 minutes to download, using DIALUP, and has been prepared and edited with good old WordStar. . . . . Editor

NVD - Suite V 2.00A

Whittle Systems



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Re:-View

by Brian Clements

I have made regular use of several local viewdata packages over the past few years. RML 380Z VIEWDATA RML MICROVIEWDATA and BBC CommuniTel. The lastest offering from SPA leaves these packages standing in many respects, but does not offer as many facilities.

The package has an outstandingly easy-to-use frame editor, with no messing about with hidden codes for colour, graphics or text size. It is possible to change these attributes in adjacent character positions without leaving gaps for hidden codes. There is a very nice pre-defined graphics alphabet size 3 x 3 characters which can be edited to your own requirements. As the graphics alphabet data is stored in a file named GALPHA.DAT it is possible to rename this file and thus create a variety of your own graphics alphabet fonts. This saves a great deal of QWASZXing (no not a typing error!) when trying to get attractive fonts on the screen using pixel toggling.

There is a good printer dump option for EPSON printers which *must* be used on a local printer and not a network printer. A utility called OVERVIEW is excellent news to teachers who have pupils that will not keep an accurate log of the viewdata frames that they have created. As well as the usual utility to list the routes *from* a page you are also able to list the routes *to* a page. This is a tremendous help in tracing lost frames and also provides a good tool for an assignment in creating a tree diagram for an existing database. The carousel feature works well but lacks an individual frame timing option.

The package seems very robust (as we have come to expect from SPA) and the 1st Year pupils I have let loose on it prefer it to any of the previously mentioned packages because it is so easy to use.

However, this is not a full implementation of VIEWDATA. Before buying any software package teachers have to consider exactly what they require of the software and to what uses it is going to be put. I would consider this to be the ideal introduction to the concept of VIEWDATA for primary/lower seconday pupils. But for serious VIEWDATA teaching the package does have several shortcomings.

Flashing colours are not available and it is only possible to display 4 colours at a time (including the background colour). However these colours are genuine and

not the awful dithering colours offered by MICROVIEWDATA. The reveal/conceal feature is not available, this could limit the scope of viewdata training packages.

My one main worry is that using VIEW it is possible to create frames that could not be displayed in genuine VIEWDATA. I have noticed in the latest SPA catalogue that they offer a utility to convert VIEW frames into MICROVIEWDATA frames. I wonder how this utility copes with 'impossible' VIEWDATA frames? It is not made clear as to whether MICROVIEWDATA frames can be converted into VIEW frames. For serious viewdata work this is essential! We capture PRESTEL frames for the Economics Dept. to give current statistics on Balance of Payments, Inflation etc. I would want to make these available in VIEW if we were to use it as a serious in-house information service.

It was a pity that SPA have stuck with tradition in choosing the QWASZX method of toggling pixels on/off for graphics work. My pupils would certainly prefer a background display the same as the nice *Design Grid* provided with the package. They could then use cursor movement to move about the grid and toggling selected pixels with one key. There does not appear to be a facility for listing all the frames in the database (although this could be done from CP/M using DIR *.?). The frames can be printed on EPSON printers but it would have been nice if PAINTSPA users could have used PRSHOP to produce colour dumps of the frames. Perhaps SPA could produce a disc of utilities for these odds and ends!

Conclusion

View is the ideal package to introduce primary/lower secondary pupils to the concept of VIEWDATA. It is also an excellent package for running your in-house information service (as long as you do not require PRESTEL frames), it is equally good for creating adventure worlds very quickly, displaying pupils work at Parents' Evenings and swapping discs between schools for inter-school liaison.

I used it within the last week for a GCSE Information Evening for parents, the format of the new GCSE Computer Studies Course was made available, together with syllabus, methods of assessment etc. It was good to see parents using VIEWDATA as a media for self instruction. At this point I must add that VIEW works very well on the CHAIN 64 network and also runs in silicon disc so that small databases can be worked on without the network grinding away all day!

However the use to which the package is to be put must be considered before purchase to save disappointment. The missing features could lead to problems if you wish to use the package in conjunction with your DTI modem for communications, or if you want full VIEWDATA effects.

We are certainly considering the use of VIEW in our 1st Year I.T. course where we currently use CommuniTel on our BBC's, but these are about to be phased out and replaced by our 480Z's. It is by far the easiest to use Local VIEWDATA Package I have found and will be ideal for our 1st Year (genuine mixed ability) pupils.

PLEA

Has anyone run a VIEWDATA host system on a 380Z/480Z/NIMBUS? We currently use a BBC CommuniTel Host (0600) 2055, but would like to replace it with an RM Host.

(Try Whittle Systems' VIEWDATA package, which allows you to run a NIMBUS as a host. **Editor**)

GCSE worksheets for Wordstar and Multiplan

by Brian Clements

Teachers of Information Technology and Computer Studies will be only too aware of how syllabii and methods of practical assessment change at frequent intervals. We have been involved in three different syllabi and three different forms of practical assessment during the past 8 years! And now we are teaching GCSE!

We received the GCSE syllabus (like many of you I expect) a matter of weeks before the summer holiday. As I had hoped, computer programming was no longer a compulsory element of the practical section of the course. At last the examination board have acknowledged the existence of wordprocessing and dataprocessing. Up until now these topics have been taught as part of our third year New Technology Course. But here we were in late July with the joyous news that we were to teach wordprocessing in September to our new 4th Year GCSE pupils.
How exciting!

The excitement waned after a few days, replaced by realism.

We have one expensive WORDSTAR manual at school which I find difficult to read, and as for the index. . . .

In what order do you introduce wordprocessing skills?

How do you provide a document for ten 480Z network stations and then ask students to save their versions of the document without the fuss of getting involved with the renaming of files?

I think I must have been one of many I.T./Computer Studies teachers wrestling with this type of problem during my summer holiday, and having attended a meeting of Gwent Computer Studies teachers, as recently as October 30th, the problems appear to be unresolved.

However, the arrival of two packages from *Micro Advice and Training* has given me cause for hope.

Micro Advice and Training (M&T) have produced two training packages, one for WORDSTAR and the other for MULTIPLAN.

Each package has the same overall design:-

1. The materials are supplied on a 5.25" floppy disc as WORDSTAR documents.

2. The documents can be printed using an EPSON FX80 (or compatible) dot matrix printer.

3. The materials can be subdivided as follows:-
   (a) Teachers notes: network guidance, printer notes, group management, session management, summary of worksheets, method of assessment etc.

   (b) Student Guide: General introduction to the topic, work record sheet, assessment of skills grid.

   (c) Summary Documents: Completed by the student as a review of the skills acquired.

   (d) Additional notes: Printer configuration, function key definitions (Multiplan).

The following is a *very brief* summary of the contents of each set of worksheets:-

WORDSTAR

1. Loading and printing a
2. Cursor movement, deleting and centring.
3. Reformatting, left/right margins.
4. Indentation of paragraphs.

MULTIPLAN

1. Loading, printing and document. saving spreadsheets.
2. Creating a new spreadsheet.
3. Adding formulae to a spreadsheet.
4. Creating a What. . . If. . . spreadsheet.

5. Block operations.
6. Page and printer controls.
7. Use of tabs.
8. Finding.
9. Finding and replacing.
10. Summary sheets/assignments

5. Building extra variables into preceeding spreadsheet
6. Saving sheet as a file for using within Wordstar documents.
7. Copying blocks of cells.
8. Comparison of saving schemes.
9. Naming cells and sorting.
10. Using windows

The WORDSTAR package is predominantly skill based although the documents used for the acquisition of these skills are very relevant to GCSE courses.

The MULTIPLAN package concentrates on introducing spreadsheet skills through GCSE type applications.

M&T invite purchasers of the packages to 'tailor' the materials to their individual requirements. They provide documents that can be easily adapted in the following manner.

(i) The student's guide can be mailmerged with a file of students names to give personalised copies (a nice touch!).

(ii) The identity of the establishment/department can be easily added, each worksheet contains a variable &IDENT& and a footer. This should impress your head/advisors!

In some respects it is a good job that M&T do invite amendments (or should I say corrections) to their packages. We found some errors which were serious enough to confuse pupils we used to tested the materials. It may be that my review versions of the documents were not in their final form, but M&T should check that the worksheets and documents are error free!

Another problem (although to be fair it is covered in the teachers notes) was that we do not have the luxury of an FX80 type printer. The worksheets are provided as WORDSTAR documents that use printer controls codes not available to us. In addition we prefer producing our worksheets using our daisywheel printers, and as these do not support italic or double width printing it involved me in time consuming removal of these control codes. (Help: Is it possible to find/replace printer control codes in a WORDSTAR document?) *Yes. . . . Ed.*

M&T do offer to prepare printer configuration files to suit your printer requirements but it might be better to produce two versions of the documents.

(a) one for the Epson FX80
(b) one that uses only bold, double and emphasised codes.

The latter type of document would work on the majority of dot matrix and daisywheel printers found in schools.

We also spent time amending worksheets to reflect our constant use of silicon disc and local printers. These materials run well on silicon disc. (I wish suppliers of RML software would treat silicon disc as the standard method of using a 480Z network station!)

My overall verdict on the packages is very good. Indeed I feel that John Martin, Fintan Culwin and Mike Filfield must have spent many hours preparing this material. In spite of the 'lack of polish' these packages at £12.00 each represent excellent value for money. They will save the overworked Computer Studies teacher hours of time producing similar worksheets. The flexibility of supplying the material as WORDSTAR documents means that you can amend 'system specific' features for your own configuration.
Well done M&T!

MUDDLES

a review by Peter Brown

Muddles is a language-based discovery program written by Mike Blamires and released by SPA in which the children have to decipher hidden messages and suggest a connect-ing theme for the messages.

I decided to use the program with a class of mixed third and fourth year juniors who were all quite familiar with the computer and who would not be overawed by the idea of using a new program. They had been using DEVTRAY for some time and "Muddles" followed on very nicely from this work.

An important aspect of primary school software is that it should be user-friendly, to the extent that the children should be able to find their way through the program without too much teacher support at the "get it up and running" level. *Muddles* certainly achieved this, since within a very short space of time, the children had tired of responding to someone else's input and had begun to create their own *Muddles*.

The introductory sequence of *Muddles* offers information and advice to the children at a simple but interesting level. It firstly asks them if they want to know about *Muddles* and gives them some examples of riddles, problems and jokes. Having told them something about the program it then asks them if they would like to see what *Muddles* does and, if requested to do so, proceeds to run through a whole series of examples of the differ-ent ways in which the program presents sentences.

Muddles presents children with a series of sentences which have been "muddled" in a wide variety of ways. For example, the words may have been written back to front, the letters may have been mixed up, spaces may have been removed or extra spaces inserted. As the level of difficulty increases so more complex alterations occur to the sentences with first or last letters being removed, the order of words being jumbled, consonants or vowels may have been removed or the top or bottom halves of words may have been sliced away.

The level of difficulty is under the control of the children who may move down a level if they cannot work out the answer and the number of attempts permitted before moving down a level is programmable by the teacher up to a maximum of nine attempts. As the handbook suggests the children would probably find nine

attempts somewhat tedious! Also under the control of the teacher is the accompanying sound and whether the letters are replaced by dashes during the "guessing" process.

Having work through the sentences on the screen, the children will be asked for a short sentence to give a connecting theme to the *Muddles* which they have solved. They will then be shown a series of themes, including their own, which they can chose from. If they rate their own theme highly it will be saved for the next group of children to consider.

The children may also create their own *Muddles* using similar devices to those mentioned above. The handbook warns about making Muddles which are too dificult at level 1 and I certainly found that my group of children, being determined to ensure that no-one could beat their scores, made their own *Muddles* very complex and difficult. An ingenious variation which one group devised was to create mathematical equations within the sentences adding another dimension to the use of the program.

There is no doubt that my group of children thoroughly enjoyed using the program and were certainly disappointed when it had to be taken away to be sent back. Whether they actually learned anything from its use is difficult to ascertain at this stage just as it is with DEVTRAY and, if one is honest, with any conputer program. Certainly, I witnessed children using a wide range of language skills and strategies to determine the answers to the *Muddles* and feel that there is a very strong likelihood of these skills being reinforced by such a program.

I have one little concern about the disc. Having been told quite emphatically from the first day a computer arrived in my school that I should always make back-up discs and not work with the original, I promptly set about doing this only to find that there was a problem over densities. Presumably this is to prevent piracy and can be understood. However, I never feel comfortable letting children loose with the master disc and I have similar feelings when using the master myself. Perhaps, however, this is an indication of my own lack of understanding of the copying process.

SPA do not copy-protect their disks. What they usually do is to prevent a stand-alone version from running on a network and vice-versa. Editor

Having said the above, I have no other criticisms. I like the ideas behind *Muddles* and I feel that those ideas have been well executed making good use of ther computer's capabilities. *Muddles* is on the shopping list for my school.

Muddles is available for 480Z and NIMBUS – stand-alone or network – as well as for the Beeb. See *Read Using 18* for price details.

The Conference

A report from The Gleaner

This year's weekend conference was held at the Ladbrooke Hotel near Chester. Between enormous meals and recovering from them, those of us who came for the computing aspect enjoyed yet another well-organised weekend. Those who came along with others to enjoy the sights of Chester and North Wales enjoyed a first-class weekend for less than £40 all found. When it wasn't raining, the weather was wonderful.

Delegates were able to choose from a wide-ranging list of activities, including NIMBUS related activites such as network management, WORD and WINDOWS as well as more esoteric delights as programming with C, GCSE course work, CLAIT and KERMIT.

RM provided plenty of NIMBUS hardware, including a complete network that was running under Network Release 2 (wonderful stuff!). Robin Hood and his merry band of 12 from the Wirral came along with another NIMBUS network. There was also a 480Z network and sundry stand-alone 8-bit and 16-bit machines.

Tony Saxby and Peter Smith from RM were erudite lecturers as well as being scholars, gentlemen and humpers of computers. Peter Smith gave the *Keynote Presentation* on Saturday evening (more of that later).

Every delegate, as far as I could tell, had ample opportunity for hands-on experience where it was relevant to his/her course and, judging by the general trend of conversation, everybody seemed to be enjoying themselves hugely, as well as learning a lot. As always, the opportunity for hours of conversation into the small hours provided stimulation and education.

There was certainly a much wider range of user represented. Whilst there were many teachers present there were also members from the business community. It was good to talk with all of these and swap experiences, problems and solutions.

The *Keynote Presentation* on the Saturday evening was, as always, a high spot. Virtually all delegates were present to hear Peter Smith talk about RM, its history, policy and future developement.

Any suggestions that RM's new machine will be called the Stratus have been scuppered by the realisation that that name has been claimed by an after-shave.

However, it's on its way. The new machine is likely to fall into one of two categories. Firstly, a new NIMBUS which will have more memory, be faster and have greater storage capacity. Secondly, a completely new micro, perhaps 32-bit, which will put the power of a VAX or PRIME mini on the user's desk. Built-in comms facilities should be expected.

For those interested, we learnt that RM was founded by Mike Fischer and Mike O'Reagan in 1973 to develop rat brain analysing machines. That's why many students enjoy using them!

It's hard to beleive now that the first 380Z appeared at the turn of 1977/78. The 480Z has been with us for around 5 years and the NIMBUS since early 1985.

In 1986, RM are employing about 240 full-time staff and some 30 temporary staff. These divide into Sales & Marketing, Administration, Manufactoring, Personnel and Engineering (Hardware and Software Design).

It was suggested that RM was different from other micro manufacturers in that it sells direct and is self-contained within one site. It serves two markets, education and business. At the moment education takes 75% and business the rest. That is a proportion which is changing and RM is actively going for the business market. For instance, in the autumn of 1986 RM landed a large corporate contract with a major communications company. RM's expertise in networking is enabling it to move in to the City to plug some of the Big Bang gaps.

RM sells some micros through dealers, notably in Scotland, Eire and Ulster. Holland represents its biggest export market and some machines have been sold in Dubai and Australia.

In the financial year 1984/1985, RM turned over about £11.5 million. In the year 198/1986 this increased to around £16.5 million. RM has never made an operating loss and, unlike little acorns, is clearly growing into a flexible company. Within about 3 or 4 years we should see its shares being traded on the USM with a public flotation at the turn of the decade – after the successful launch of the new machine.

It takes 6 minutes to build a NIMBUS! This is important as RM is going all out for corporate business as well as the education market. Business users like to have machines yesterday and whilst AMSTRAD may well corner the UK 16-bit IBM-clone market during 1987, RM has a good opportunity of doing nicely by having a home-made machine readily available.

Educational users were interested to hear that the good old 480Z now only accounts for about 10% of production. However, we were told that RM sold many more 480Zs last year than they had planned. The sting in the tail of 480Z news is that prices are likely to rise during 1987 as much smaller production runs mean higher unit costs and therefore higher end-user costs.

Peter Smith gave a useful run-down of product developments and releases since the last Weekend Conference. I repeat them as jotted down, with no real differentiation between machines. So, we had, at long last, the free upgrade/

rewrite of 480Z TCL PASCAL; a whole variety of NIMBUS products, including the following:

NIMBUS Network; WINDOWS;parallel PICONET;Advanced Programmers' Guide; PC PAINTBRUSH; AZTEC C; MULTIPLAN; MASM; WRITE; LOTUS 1-2-3; BBC BASIC; AUTO-CAD; NIMBUS Tech Packs; a comms card; SUPERFILE; COBOL; DBASE 3 plus; 20, 40 and 80 megabyte winnies; LOGISTIX and so on.

For the 480Z and NIMBUS were CHAIN 64; VT100 terminal emulator; PROLOG; MicroViewdata for the 480Z.

Also recently issued have been new Educational and Business catalogues for NIMBUS.

RM are clearly at pains to stress that support for both the 380Z and 480Z are on-going. Product development for the 480Z and 8-bit networks continues in a small way and during 1987 existing users – largely in education – will be notified via the *Schools Newsletter*. RM is giving lots of encouragement to software developers to continue supporting the 480Z in particular.

I was a little concerned that the User Group had almost forgotten the 8-bit users. I heard several other delegates express similar concern. Whilst we all accept that RM is bound to put 90% of its effort behind promoting the NIMBUS we must remember that there are still a lot of 8-bit only users out there.

It was rather a relief to be assured that the User Group would not neglect the 8-bit user in any way. I was told that the 1987 Weekend Conference would contain plenty of meat for all users of 8-bit machines.

Having heard that, I resolved to come again. Peter and Sarah Bishop deserve fulsome thanks for the way they had organised such a successful weekend. Let me leave the gentle reader with one last observation. It's funny how sometimes one hears the same thing mentioned in mealtime conversations time and time again. I don't know if *RM User* has a *Software of the Year Award*, but it would have to seem to go to *Robot Arena* which certainly seemed to stimulate much conversation amongst the teachers. Perhaps readers should write to the Editor with their suggestions.
(Please do! *Editor*)

AlphaStat

£ 49.00 + VAT

A powerful mathematical, statistical and graphics software pack which operates on tables of numbers – 8 columns, 64 rows:

Mathematics: Formulae can be evaluated over entire columns.

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Graphs: Line and bar graphs of one or two variables plotted against another variable.

Subjects: Research in natural, social or medical sciences. Administrative uses such as tabulation of examination results.

Computers: RM Nimbus. The same version runs stand-alone and on networks.

Peter Bishop Associates
23 Larkfield Road
Richmond
Surrey TW9 2PG
01 948 4382

PBA

User Group Day at ILECC

Robin Davies

On Saturday, 29th November, 1986, the User Group ran a Day Meeting on Communications at the Inner London Educational Computing Centre.

With the exceptionally kind and efficient support of the ILECC staff various activities took place in the central lecture hall. The meeting was very well attended, with around 100 present, from as far away as Edinburgh.

The morning session was devoted largely to RM demonstrating *Domesday*, with the actual equipment used the night before on BBC's *Microlive* program. Aside from some display problems with the £10,000 ohp Colin Watkins brought along, all who saw *Domesday* in action on the NIMBUS were impressed. I found it breathtaking, the ultimate executive toy! No, really it is an amazing educational asset.

We also heard about BBC BASIC, Network Release 2 and saw them in action.

The sessions on communications covered TTNS, KERMIT, MICROVIEWDATA on the NIMBUS with Peter Whittle Systems' package, BTG GOLD and MICROLINK, DIALOG and THE KNOWLEDGE INDEX with DIALUP from PMS. See the review of DIALUP elsewhere.

Unfortunately, the whole day was plagued with technical problems. Murphy's Law was in full operation and the day was saved by the tolerance and good humour of all present. Despite these glitches, much was seen and heard and lots learnt. Some problems were even solved and perhaps some created.

One of the most surprising things, I felt, was to hear of how few subscribers there were to TTNS. However, when we we told of the annual subscription of £187, it is not surprising that nationwide there are only 3,000 subscribers.

Much interest was shown in MICROLINK, a subset of BT GOLD and its initial joining fee of £5 and monthly standing charge of £3 plus usage seemed a good buy for many present. Anyway, some 75 leaflets were snapped up!. Remember, you can reach *M User* via BT GOLD and MICROLINK on 72:MAG90380. It's costing the User Group around £11 per month to maintain its email facilities, which is a lot less than TTNS.

All in all, a good day. Clearly communications is a topic of the moment. We hope to devote more time – and space – to it during 1987.

Modification of 480Z drives for NIMBUS

by R.A. Naylor

If you need to read IBM format discs on a NIMBUS then you require a 5¼ inch drive. With a piece of software called XFERCPM from RM it is also possible to read files off double density 480Z CP/M disks. The accompanying diagrams show how it is possible to adapt the MD2 480Z drives for use on both the 480Z and NIMBUS. As far as I am aware this modification will not work with MQ2 drives.

The process involves the construction of cables and some internal modifications to the 480Z drives.

Requirements

3 x 37 way D-type plug	RS 472-281
2 x 37 way D-type socket	RS 472-297
2 x 34 way edge connector	RS 471-288
1 x 34 way polarised socket	RS 474-322
1 x 40 way polarised socket	RS 474-388
1 x 40 way polarised plug	RS 480-260

Ribbon cable: 40 way
37 way
34 way

1 x dpdt switch

XFERCPM software from RM

480Z Drives

Removal of the four screws from the rear panel allows the complete drive unit to be slid form its case. Looking from the rear the IDC board lies on the right hand side of the unit. Figure 1 shows how the drives are daisy chained to the IDC board. The first modification involves the breaking of this chain and taking it out to the back panel as a D-type plug and socket. This enables the chain to be broken into when connecting to the NIMBUS when only drive A/C will be used.

Fig. 1 **Schematic Diagram of MD-2**

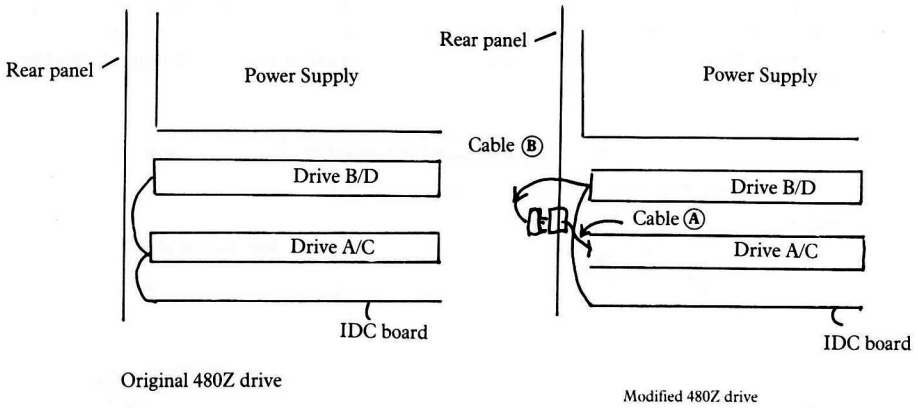


Fig. 2 **Internal Nimbus Cable**

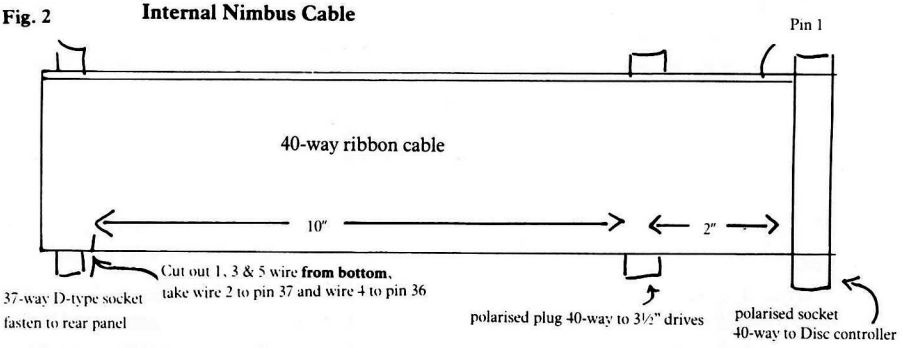
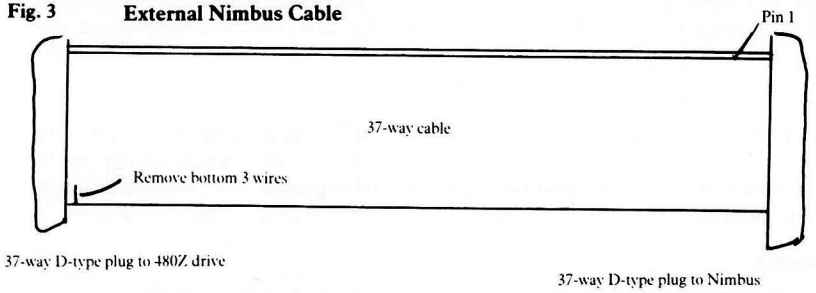

Pin 1
40-way ribbon cable
10"
2"
Cut out 1, 3 & 5 wire **from bottom**,
take wire 2 to pin 37 and wire 4 to pin 36
37-way D-type socket
fasten to rear panel
polarised plug 40-way to 3½" drives
polarised socket
40-way to Disc controller

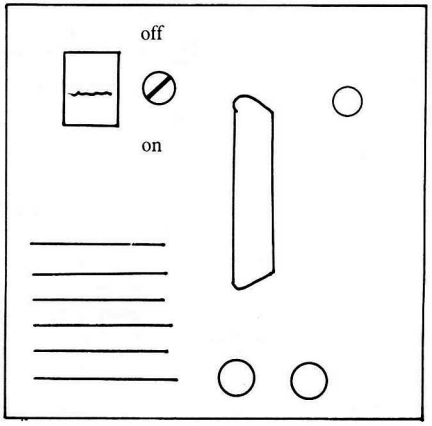
Fig. 3 **External Nimbus Cable**



The back panel requires a hole drilled to take a switch (Figure 4). This switch is wired to the controller board on drive A/C (Figure 5) so that this drive may be assigned as a drive C: when being used with the NIMBUS or a drive A: under normal 480Z use. Two new cables are required (Figure 6). Cable B is brought out by running it over the rear panel of the drive. In normal 480Z use it is plugged into the D-type socket which terminates cable A in the rear panel.

Modifications to 480Z Double Density Drive MD-2

Fig. 4



NIMBUS

Suitable cables for the NIMBUS are descibed in figures 2 and 3. However I would recommend their purchase from RM as the cost difference is not great and the internal cable is terminated with a proper plate to enable it to be fitted to the NIMBUS, casing easily. The external cable supplied will require a D-type plug adding to the drive end. This cable may be used with a suitable free drive as it also has a power outlet plug attached.

Use

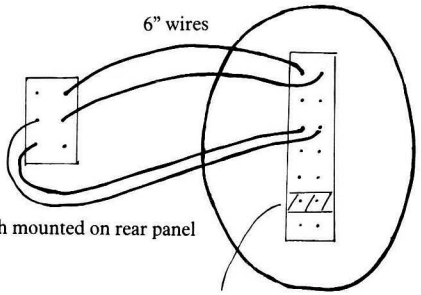
Configure your NIMBUS for an external 5¼ drive using CONFIG. On a PC2 the drive will be designated as C:. Connect 480Z drives, select switch setting on the drive for use with Nimbus and switch on the drives power. Both NIMBUS and 480Z drives should be connected and powered up before booting. This is important.

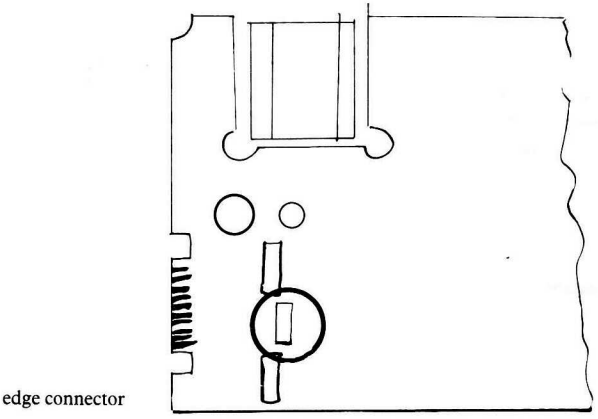
Warning

Such internal modifications will almost certainly nullify any waranties.

480Z drive – Rear panel

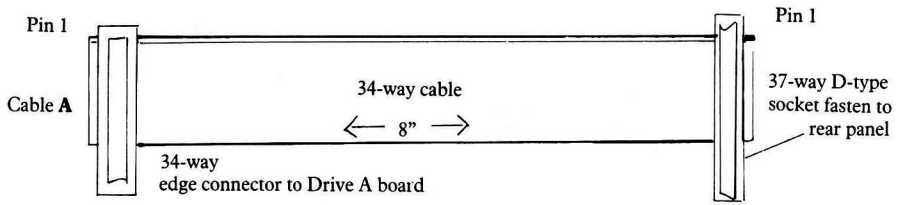
Fig. 5

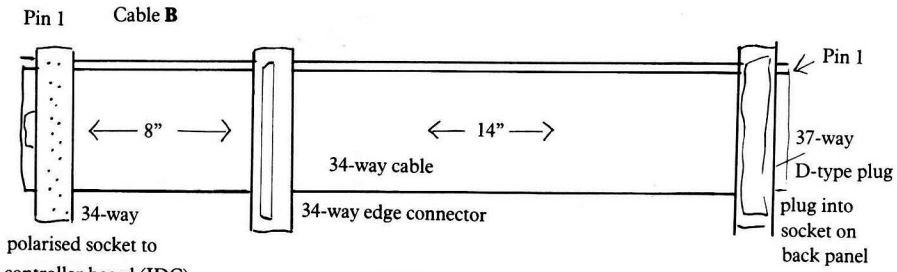




Controller Board on Drive A

Fig. 6





480Z - Internal Cables

Microsoft Windows

by Becky House

A program name often gives a clue as to the uses or content of the program, and in this case two possible definitions spring to mind:

- a series of areas of the computer screen which can be accessed seperately for input or output using a control program to do this or. . .
- an object designed with the specific purpose of keeping the weather outside where it belongs.
- As this article is printed in a computer magazine, I was forced to assume that the former definition was the intended message conveyed by the name.

First of all, the equipment used for this exploration into the world of 'WINDOWS' was a NIMBUS PCN2 with 1024K of memory and a mouse. The WINDOWS package was residing on the hard disc on the server unit. As a reccomended minimum, the documentation for this package suggests a minimum memory size of 256K and an operating system of DOS 2.0 or later.

The use of a mouse is not necessary as the package can be controlled using a standard keyboard, however I tried this and as a consequence, strongly reccomend the use of a mouse.

If you do intend to use the package without the mouse then you are going to wear out the writing on the ALT key and at the very least become very aware of it's position on the keyboard.

I remember the first time that I ever used WORDSTAR and being thrilled at the prospect of being able to do weird and wonderful things with text, and all using simple commands like CTRL/K B, CTRL/K K and CTRL/K Y to remove a chunk of text. Today that sort of command is a pain simply because of the invention of the mouse, it has made us all lazy because once you have used one you don't want to go back to the 'Old fashioned way' of doing things.

The basic idea behind WINDOWS is that you load the framework of the program into the memory and then load in such application software as you may need on top of that. The result is that the input and output of each piece of software can then be redirected by the WINDOWS program to wherever you require.

For example, let us imagine a user wishes to produce a report for his/her branch of a company. The finished document will need to include a written part pointing out trends and policies, numerical data to back up any conclusions that are made and perhaps even a diagram or two to give the document that certain something that may help towards the understanding of the 'global picture' (I think that is the phrase that businessmen would use.)

In the past, the written part would be roughed out or even written on a word processor and then a final copy of the document part could be printed/typed out. Figures to be included in the text would be painstakingly copied across from some database with all the problems that that involves. If you have ever tried to copy a page of a database into a word processor with all those vertical lines and tabulated figures, you will know what I mean. Spaces for the pictures that are going to be worth a thousand words, are left in the document for insertion later. With luck the pictures will not be too small to see and they also won't be so large that some of the data or labels are lost. How often is it right first time ?

You end up with a master that has been typed out, had the odd line drawn in in biro here and there, and a picture stuck into the correct place and you are ready for the photocopier. As long as the contrasts of the parts are fairly similar, you even get a fair copy for yourself.

Now, dear gentle reader, consider the WINDOWS alternative. The person who is going to create the document can start from scratch and work the whole thing through from start to finish. Using windows, the database is called in first and the parts required are noted. Splitting the screen in half and loading into the other half of the screen, a graphics package, (so that he can refer back to the database for the figures being represented) the user creates a diagram or two and saves them on the disc.

Now, loading in a third package, the word processor, the user starts his report and when he gets to the relevent place, simply redirects the output of the database to the input of the wordprocessor and 'hey presto' even the vertical lines are present. As the document progresses, a diagram is placed acurately into the text by redirecting the output of the graphics package to the input of the word processor. All clever stuff.

When the whole document is finished the printer produces a document with text, database information and graphics too and all with the same contrast for the photocopier.

Sounds like the finest invention since barbed-wire, as my R.E. teacher used to say, but there are a few minor disadvantages.

Let us assume that you want to know what the time is. There is a file called CLOCK.EXE which checks on the internal clock of the computer. You can load in up to 15 copies of the clock, (it begins to look like a television rental shop at Christmas) but the more applications that you pull into memory, the smaller the display that you can see.

Most packages are designed primarily to work on the full screen. This is to be expected and if you stick to three or four applications at any one time you won't have many problems but if you go mad and try to use 15 different packages at once you deserve all the problems you are going to get.

This problem of putting a quart into a pint pot (1 litre into a 500 cc beaker doesn't have the same ring) is alleviated to a certain extent because even if your full page display is being fitted into the botom left hand corner of the screen, you can move around what would be the whole screen display using the two scrolling controls on the bottom and to the right of your window. This is a bit like an Irish glass bottomed boat where the boat stays still and the ocean is moved.

The WINDOWS package comes with a number of application programs which include :

CALC.EXE

This is a simple calculator which can be used for totalising and checking figures It is only capable of basic functions but nevertheless it is useful to have the facility available.

CALENDER.EXE

This is, as the name suggests, a calendar simulator. It is not just a simple simulation of a calender by any stretch of the imagination. The calender can display in two modes, a daily mode and a monthly mode. The daily mode gives times down the left hand side of the screen and appointments or meetings can be entered against these times. The period of the times can be set to your own personal needs. There is an alarm facility which will draw your attention to any important appointment. There is also a monthly mode which gives the month in a standard wall calender format for the dates 1st Jan 1980 through to 31st Dec 2099.

This is perhaps a little optimistic on the part of the designers as we will all be dead and burried by then and this package will be a quaint example of our backward age. (Incidentally, 31st Dec 2099 is a Thursday!)

CARDFILE.EXE

Many people do not like computers simply because they don't understand them. If a human being doesn't understand something then they usually become afraid of it and if that happens to a piece of software it will never be used. Many databases are complicated and can confuse the uninitiated, this database uses a card system for simplicity to understand and the power of the mighty chip to make life easier. The screen display can be in card format or as a list depending on preference. To me the best part of this application has got to be the fact that you can use the telephone numbers on the card to ring the person concerned automatically using a modem. (*This facility doesn't work properly yet – Editor*)

CLOCK.EXE

This application is useful to keep track of the time (as long as you set the clock within the computer). Perhaps the best way to use it is to load it into memory and then keep the screen space clear by using the CLOCK icon. The icon is a small clock face and is quite readable without using up any work space.

PAINT.EXE

This is the graphics package and it's usage depends on the users skill in creating pictures. Logo design and diagrams can be used to good purpose as described above.

WRITE.EXE

This is the word processor provided with the package and is fairly compatible with MICROSOFT WORD. There are a number of points that need to be bourne in mind in transferring between these applications the most obvious of which is that although WRITE will allow you to use graphics in the text, WORD will not and as such users will need to delete graphics from the WRITE file before transferring to WORD. To be on the safe side, read the manual on this point and check version numbers of the software.

REVERSI.EXE

This is the executive toy that seems to come standard today. It may not help you to produce better documents but I suppose it could be argued that it can sharpen the wit, and rest the troubled mind. If you try to beat the computer at the highest difficulty however this program could have the opposite effect.

The MicroSoft WINDOWS layout

The first thing I feel I should warn you about is something that happened to me. Recently I had a memory upgrade (the computer, not me) and as a result when I came to use the mouse with WINDOWS, nothing happened.

I loaded WORD and the mouse worked fine. I looked through the documentation and it suggested that if you could not get the mouse to work then there could be a wiring problem. Funny I thought, I didn't think that the memory of the machine had anything to do with the mouse. After a few well chosen words had dropped from the lips of our sacred engineer, all was well.

WORD looks at the mouse port and if there is any change in the values coming from that port, then logically there is a mouse connected and so the icon is switched on. Not so for WINDOWS. WINDOWS looks at the machine's config table and if the mouse is set to be off then you can press buttons and wizz the mouse around your desk at warp factor 12, but WINDOWS considers that the mouse is off so nothing happens. Use CONFIG to check that the mouse is switched on before you start ripping wires out of the back of your NIMBUS.

The first thing that you see after WINDOWS is loaded into memory is the MS-DOS

Executive page. This is your main menu and there is a catalogue of the files on the current directory. There are several areas to be aware of, these hold true for almost all of the applications available to the user.

The name of the application is in the centre of the top of the window. To either side of this is a coloured area. Red when the application is active, grey when it is not. To activate an application simply move the mouse pointer to the application name and click the left button once. If you click this area twice in rapid succession then the application will become an icon and move to the bottom of the screen.

The bottom of the screen consists of a grey border where there is space for 16 icons. Depending on memory this space is for 15 applications and the main menu icon.

The icons are fairly obvious in their meaning, a clock for CLOCK, a pencil for WRITE, what looks like an electric cooker seen from above for REVERSI and a floppy disc for the main menu (MS-DOS Executive). In order to use one of the applications in the icon row, simply move the arrow onto the icon and press the left button down and hold it. Move the icon which you have now picked, up into the middle of the screen. The application you have chosen now appears on the screen and the application that was on the screen before is now an icon on the bottom row.

In the top left hand corner of the window is a little box with horizontal bars. If you press down the left button and hold it down whilst the pointer is in the box, a menu pulls down. By moving the mouse down, the items on the list are highlighted one at a time. If you release the left button whilst About is highlighted, a panel will appear in the middle of the screen giving information about the application that is active. Zoom will take an application and make the window that it is using, fill the whole screen. Selecting Zoom again reverses this action. Close terminates the application in the window.

In the top right hand corner of the window is another square. When there is more than one window on the screen the size of the window can be altered by following these steps.

Place the arrow in the box, press down the left button. Move the mouse slowly and you will see the box, a vertical and horizontal line moving on the screen. These lines represent the new size and shape of the new window. On release of the left button the window changes to the new shape.

Below the red/grey bar with the name of the program are pull down menus. In the main menu case, there are three pull down menus on the left hand side of the screen, *File*, *View* and *Special*.

By selecting these menus in the same way as the top left hand box and menu, the following options are given:

FILE

Run – Load the highlighted program and run it.
Load – Load the highlighted program and put the icon at the bottom of the screen.
Copy – Copy the selected file from A to B.
Get info – Gives a mini directory of the selected file with all size/dateinformation.
Delete – Deletes the highlighted file.
Print – Prints the highlighted file.
Rename – Renames the highlighted file

VIEW

Short/Long – Format for the directory.
All/Partial/Progs – Show all files on in directory, only named files, Only COM and EXE files shown – respectively.

Name/Size/Date/Kind – Sorts the directory by Name, Number of bytes, Date of creation or extention type – respectively.

SPECIAL

End Session – Leave Windows.
Make a directory –
Change Directory –
Format a data disc –
Make a system disc –
Set Volume name – Give the disc a name.

In order to select a file simply move the mouse pointer onto the file that is required and press the left button once. For the sake of speed, if the user wishes to load a file quickly, simple press the left button of the mouse twice in rapid succession whilst pointing to the required file. The file loads automatically.

If the display of a program becomes too large for the window, a slide appears at the side of the window. If the display is too long, then the slide appears to the right of the window. If the display is too wide for the window, the slide appears at the bottom. The slide allows you to move around a large display with a small window. The slide has an arrow at each end, a white part and a grey part. The grey part represents the total dimension of the display and the white part is the part that is shown on screen.

There are several ways to move the windowed area. If you position the pointer onto one of the arrows and press the left button once, the window moves one line of text in the direction of the arrow. If you hold the button down whilst the pointer is on an arrow, the screen will scroll continuously until the window reaches the

edge of the document. If you wish to move a long way through the display quickly, position the pointer on the white area of the slide, press and hold the left button then move the mouse in the required direction. A ghost image of the white area moves with the pointer along the slide and when the button is released the white area jumps to the ghost position.

In order to run two or more applications on the screen at once, simply select the first application icon and place it in the middle of the screen. The screen now holds the first program. The second icon is now selected and moved so the it is over one of the edges of the screen. When you release the mouse button the second application takes up half of the space occupied by the first program, in the opposite direction to the edge that the icon was dropped onto.

To put it more clearly, if the screen is filled by application 1, and the icon for application 2 is dropped on the bottom edge of application 1, the result is that application 1 occupies the top half of the screen and application 2, the bottom half. The way in which it is possible to run two different applications at once is quite simple as long as you remember which one is active (red top line) and which is inactive (grey top line).

All in all, WINDOWS is a very powerful and simple to use package. Not all of the applications supplied are mentioned above but bearing in mind that the MICROSOFT manual is about 1 inch (2.5cm) thick, the ommissions are only to be expected.

The open-endedness of the program means that the effects and uses that the program can be put to is really up to the user. I can't imagine any situation where it isn't advantageous in one way or another. It must be said that the obvious market for this package has to be business and where this package scores over some integrated software is in it's flexibility, in that, other programs than those supplied can be used in windows – this includes programs like *dBASE* and BASIC using Program Information Files (PIF).

Case History

by Leading Edge.

Further developments on our NIMBUS X10 have been made both with hardware and software.

In order to make full use of windows we upgraded the motherboard to 512K. Ours was one of the original 128K boards, and replaced the 500K add on board with a 1MB board. This gives us a total RAM of 1.5MB of which 500K we were unable to access through software limitations.

Obviously there had to be a way to access the 500K, so we contacted *Whittle Systems* who, for £25, provide a program to make this 500K into a silicon disk. This is very easy to install and has worked perfectly. So what,you say, do you do with a silicon disk?!

Well, the theory is that you put the files that WINDOWS use most frequently into Drive F: which is the name for the silicon disk. For those who are not familiar with silicon (or RAM) disks, they behave in most respects like another disk drive. Their main advantage is cutting out the disk access time for files or programs stored on them. The disadvantage is that they are volatile, i.e. when you turn the machine off you lose the contents of the silicon disk. So how to exploit the advantages and avoid the pitfalls? Only put programs on the silicon disk that will not be altered.

It seems unwise to put WINDOWS's or any other applications' temporary files there, unless you are prepared to save the disk at regular intervals.

At the moment we are working with the following instructions inserted in the \Autoexec.bat file:

```
Path F:\;C:\Windows    :tells DOS to look in drive F: for
                       programs it needs to run.
CD\Windows             :changes directory to \Windows directory.
Copy WIN*.* F:\        :copies Windows program files to drive F:.
Copy control.exe F:\   :copies Windows control program to drive F:
Copy MSdos.exe F:\     :copies Windows MSdos.exe program to drive
                        F:
F:\WIN                 :changes drive from C: to F: runs
                       Windows program files from drive F:.
C:                     :changes drive on exiting Windows
                       to drive C (=harddisk).
If  you already have a <path> command in your AUTOEXEC.BAT  file,
just add ;F:\;C:WINDOWS to the end.
```

Make an alteration in your WIN.INI file. The entry in the [pif] section is usually configured to SWAPDISK = ?. Change this to SWAPDISK = F: on systems with other than two disk drives this will be D: for one drive, G: for three etc. .

Alter the config.sys file to include the following instructions:

```
Device = S1-turbo.sys
Lastdrive = Z.
```

The effect of the *Whittle Systems* silicon disk program has been a noticeable increase in speed of operation with WINDOWS, particularly since it has effectively freed some of the RAM otherwise occupied, thus allowing more programs to be run concurrently. In case anyone believes that the silicon disk option in the Config program supplied by RM does the same thing, it does not. It steals some of your useable RAM, thus reducing the amount available for applications like spreadsheets, accounts and wordprocessing programs.

Talking about alterations in WIN.INI, I use a colour screen, with the window set to 255 255 255 (which gives a white screen), and other settings to give black letters, light and dark blue title bars and red scroll bars. I found if you alter the setting in WIN.IN under [NIMBUS] Border=white (see Window handbook page 170), you don't get a white border as stated. However, Border=255 255 255 does give a white border.

You can use WINDOWS *Notepad* instead of EDLIN or a wordprocessor to make the foregoing alteration, after saving each of the files restart your computer. WINDOWS will start automatically from your new ram disk.

WINDOWS, apart from providing a pleasant and convenient interface between user and machine, has some very useful programs included in the package. I have mentioned *Cardfile* with its autodial facility before. While we still have not discovered the secret of making this particular facility work in combination with *Miracle Technology's Modem 3000* and BT's outmoded pulse dial system, it is very useful to be able to look up your suppliers, customers, students or whatever, not just by name but by whatever they consume, supply, christian names, surnames, habits or whatever, provided the word you search on is on the card.

So often you cannot remember a name, so select on what you can remember, probably the wrong one comes up first, but F3 finds the next, I know you can do this on other programs, databases etc., but you pay a lot more for them.

Calendar is another handy program. Include it in the WIN.INI file under RUN and a list of your days appointments is on screen from the moment you turn on, with alarms to wake you up in time! There's more, there's more . . . . A very adequate wordprocessor is included, as is a calculator that is more use than you might think. A notepad for quicknotes which can be printed either to file on disk, printer or pasted to other files. In short a program that you can hardly afford not to have, but you do need at least 1MB of RAM to make the most of it.

In a previous article, I mentioned backups using /M and /A switches. If anyone has had trouble restoring files backed up using the /M and /A switches, i.e. trying to restore files with the /b /a switches as on page 3-57 in RM NIMBUS MS-DOS 3.1. There is a bug in MS-DOS 3.1; to get this to work, first make an entry in your config.sys file Country = 001. This sets the date to mm/dd/yy, everything then works as it should, you can restore files backed up at a certain date. When you have done this, remove the command from your config.sys file and the date reverts back to normal!

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Oxfordshire WRITE

by Ken Maynard

There are several word processing packages available for the Nimbus of which WORD, WORDSTAR and WINDOWS WRITE are probably the most well known.

RM is now supplying Oxfordshire's WRITE with NIMBUS networks. It is a pity it is not sent out with all machines. These days every computer should come with a usable word processor and WRITE satisfies my criteria for such a program almost exactly. It is an excellent program on which to begin and many users will find that they need never buy another. A virtually identical version is available for the 380Z and 480Z, which can be very handy in a school.

The virtue of WRITE is its ease of use combined with its power. On loading, a simple menu appears that allows a new file to be started, an old one to be edited or a directory to be listed – with all the wildcard facilities and sub-directory syntax that might be needed. Next, an uncluttered screen appears that can immediately be put to good use. There is completely automatic wordwrap that ensures that the whole screen always looks as it will appear on paper.

The editing keys are all quite logical and several comprehensive help displays quickly remind the user of any of the less often used functions. Well laid out screens show the many configurable settings such as the page size and margin widths. Like most word processors it has a few inserted formatting codes to cope with various printing effects and it can be configured for the majority of printers very easily. Also very simple is way in which it can be set up for a particular use. Line length, tab settings, page numbering, visible ruler, etc. can be changed in seconds and a single command will ensure that they will be the default values the next time WRITE is run.

I have found WRITE valuable in school because of its immediacy and because it allows both document and text files to be created or edited. A particular virtue is that it will convert from one format to the other. The only missing item that it would be reasonable to ask for is overwrite. WRITE is not meant to have every feature as it is designed to be easy to use and would only be more complicated if too many additions were made. It is remarkably cheap and therefore excellent value for money. If a user discovers that he or she subsequently needs a more powerful program then there are plenty available. The principles will have been learned and the small investment will not have been wasted.

Oxfordshire's WRITE is obtainable from RM for about £29.

Modifying speed and accuracy requirements of Touch'n'Go.

by Mike Sharp

Being too old to have nimble fingers, but wanting to develop a little keyboard skill I thought I'd have a go with TOUCH & GO since it came free with the network. I soon found that although I could cope with the accuracy required, there was no way I could manage the speed requirements. I wondered if this only applied to the over 40s or whether some kids doing keyboard familiarisation at school might also get frustrated at not being able to meet the targets.

The documentation provided seemed to have been scribbled on the back of a fag packet during a short bus ride so I investigated the way to set my own speed and accuracy requirements into TOUCH & GO

Here is what I found: with the program is a file called TYPMSGS.OVR which starts like this:

```
61
*1,1,100,30,1,d
*2,1,100,30,4,de,ded,ed,deed
*3,1,100,30,3,f,fee,fed
*4,1,100,30,5,ftf,feet,tee,ted,teed
2,95,25,1,"deed edd feet tee fed feed tee teed ted deed"
*5,1,100,30,7,frf,free,fret,red,reed,refer,tree
2,95,25,1,"free red feet tree reed refer fret free feet"
*6,1,100,30,8,a,at,add,are,art,after,far,fear
*7,1,100,30,8,dare,dead,dear,ear,eat,read,tear,trade
*8,1,100,30,1,;
2,95,25,3,"fed fee free; add are art; a red read free;"
"dead dear dare; a far fear; eat ear; dead fee;"
"tree trade tear; fed fee free; add are art;"
    etc.
```

You may recognise the contents of the first eight lessons. The format appears to be:-

```
61=number of lessons
*1=first  lesson,1=first  part,100=ACCURACY,30=SPEED,1=number  of sublessons.
```

If I change all the 30 speeds into 20 speeds and save the file, I can type slowly and still pass.

I used WORDSTAR to do my alterations though you could use WRITE. It is strongly recommended that you make a copy of your TOUCH & GO disc *before* attempting these alterations, just in case something goes wrong!

Load TYPMSGS.OVR into WORDSTAR using the N (non-document command). Issue the search and replace command (CTRL-Q CTRL-A). In response to the FIND? prompt type ,30, <RETURN> Replace with ,20, (or whatever speed you think suitable) <RETURN>. When asked for OPTIONS? type ng <RETURN>.

WORDSTAR will now search for all 30s in the file and replace with 20s (or whatever). The leading and trailing commas are necessary to ensure that the lesson numbers aren't changed.

The same method can be used to change the accuracy if required.

To alter the numbers requirements, change the file NUMMSGS.OVR.

Have I confused you further?

Writing Adventure Games in RM Logo

by Les Watson

As part of the TVEI course which I am teaching at present, students are required to *write a simple structured program in a high level language*. The group consists of 18 students of 15 years of age, with programming skills ranging from none to a good working knowledge of BASIC. I have about four hours contact time in which the students can achieve the stated objective!. I had in mind the writing of an adventure game, as this brings in a number of skills, such as mapping, logical thinking, planning, being creative, and communicating ideas, which are all felt to be important areas of experience. It was also hoped that this could give a more definite purpose to the programming activity and provide a more tangible, worthwhile end product.

The idea of children writing their own adventure games is not a new one, and several 'methods' are available, suitable for early primary children onwards.

1. **MAKE an ADVENTURE** is a very easy to use program for young children which is available as part of the MEP Primary Project Infant Pack (see elswhere in this issue for details).

2. It is possible that **BASIC** could be used, but I felt it very unlikely that the students would be able to reach the required level of knowledge and expertise in the short time available.
3. Bob Hart's **TOMBS of ARKENSTONE** program has a *make your own adventure* section. This consists of pages of text with the Tombs of Arkenstone story format. These pages have blanks on them for locations, heroes, villains etc. and the children can fill these in. The end result is a Tombs of Arkenstone adventure with the scenario and characters chosen by the 'programmer'. Obviously this doesn't fit the requirement to program in a high level language and so was not suitable for this purpose.

4. In **QUEST ADVENTURES** Bob Hart has extended the facilities for children to write a truly interactive and original adventure using Quest as the backbone of the system, so that scenes are written in the format of Quest records. I have not used this program but have been impressed by demonstrations given by Bob Hart.

5. Another method of writing adventures available to RM users is to use **THE PLAN** by Jonathan Briggs. This is a front end shell for LPA MICRO-PROLOG specifically designed for adventure writing. The school in which I am working does not have micro-prolog so we could not use this system, although I have used it with younger children, and found it to be very successful.

6. You can also do it in RM LOGO, with only a minimal knowledge of the language. As this involves both the TVEI requirement of 'programming' and my own requirement of being a rewarding and enjoyable activity, this is the way I decided we would tackle the exercise.

The students had very limited knowledge of LOGO, although some had experience of programming in BASIC. I introduced the language through turtle graphics using a floor turtle for the first part of lesson one. The students fairly quickly got the hang of this and moved on to the 480Z's drawing on the screen in direct mode. I then showed them how to BUILD procedures and use procedures within a procedure. It wasn't long before they had built the circle and wanted to start using variables, so this was the next step. This was followed by a brief look at the SAY command, for putting text on the screen. They now had all the tools they needed for the adventure writing task which was set in the following form:

> "Write an adventure story, which includes a map and translate the story into commands for the computer. If possible use graphics to illustrate some of the scenes in the story."

To program the text of each scene all the students have to do is use the BUILD and SAY commands in the following way:

```
BUILD CAVE
SAY [YOU ARE IN A LARGE DARK CAVERN]
SAY [IN THE EERIE INTERIOR YOU CAN]
SAY [SEE A PAIR OF MENACING EYES]
SAY
SAY [WHAT WILL YOU DO ? FLEE OR FIGHT]
```

Having written this procedure as the starting point it can be tested by typing CAVE. The text of the location will appear on the screen, but typing FLEE or FIGHT will produce the response "they don't exist" (at present!). So the obvious next step is to BUILD FLEE which could SAY [YOU GAVE IN TOO EASILY-GAME OVER] and BUILD FIGHT which could SAY something like [YOU FIGHT THE whatever it was AND WIN] followed by a further choice eg. of two locations or directions. A range of choices can be offered at each level by writing different procedures.

For Example,

CAVE

FLEE FIGHT

EAST WEST NORTH SOUTH

The main emphasis in the writing of an adventure is on the skills of planning and creativity, since the programming knowledge is relatively trivial. The students are putting most of the effort into creating the story, but there is the added dimension that they can take part in the adventure. The teacher's role is to stimulate the students creativity, and steer them away from the stereotyped dungeons and dragons computer adventure game. To facilitate the production of new ideas, much emphasis should be put on the planning of the adventure. A good starting point is the production of a map to help the students decide on the names, numbers and routes between the locations. Having drawn the map, location descriptions can then be discussed and prepared ready for typing in. Most of the work is done away from the computer, and could be set as a homework exercise if desired.

With time it is also possible to incorporate graphics into the adventure. These can be produced as drawing procedures and called by the appropriate locations. This will not work if you are in TEXT mode, but this is not a problem, if they are not working just type DRAWING and try again .

In this early state the adventure has a range of locations with, perhaps, some graphics, and gives the player the opportunity to move from screen to screen. What it doesn't have are objects which can be taken, or used. These can be added (by creating a variable which is incremented when certain choices are made by the player) but as I didn't get that far with my class I'll let you try that out if you take up this activity!

The range of adventures produced by the class was fairly wide, ranging from ones based on *home* to locations such as *stables*, *dreams* and *New York*. The students tackled the task with a great deal of enthusiasm and seemed pleased with the results of their efforts. I was also pleased with the results, as it captured the students imagination and stimulated them to produce some good work , whilst also opening the programming section of the course to include a wider range of skills such as Communication and Information skills. Overall the whole exercise was a successful one – Well worth repeating and developing!

Resources

1. **Make an Adventure** from the MEP Primary Project Infant Pack 1 for 480Z available free from RM USER GROUP.

3. **Tombs of Arkenstone** by Bob Hart. Available from:

   The Arkenstone Project,
   22, Fanshawe Street,
   Hertford,
   FG14 3AT

   and costs £17.25 (for 380Z or 480Z)

4. **Quest Adventures** by Bob Hart. Available for **C only from,

   The Advisory Unit for Microtechnology in Education,
   Hatfield,
   AL10 8AU

   and costs £25. You will also need QUEST to run Quest Adventures. Your LEA may have a license for QUEST or you can buy direct from the Advisory Unit. QUEST costs £22 if purchased with Quest Adventures or £27 if purchased separately.
5. For further information on **The Plan** by Jonathan Briggs write to:

   J.H. Briggs,
   Kingston College of Further Education,
   Kingston Hall Road,
   Kingston on Thames,
   KT1 2AQ

   You will also need Micro-Prolog to use The Plan which is available from:

   Logic Programming Associates Ltd.
   Studio 4,
   The Royal Victoria Patriotic Building,
   Trinity Road,
   London,
   SW18 3SX

   for 380Z, 480Z and NIMBUS price £45 plus VAT for a stand alone version.

M.E.P. Software

The User Group now has the range of programs produced by the MEP Primary Project. *Don't* stop reading here Secondary people! Many of the programs are useful for work in secondary schools. In agreeing to supply these to RM Users, I have also agreed that they will not be sent out without documentation, and for that reason have not put them with the rest of the User Group programs (John Ward has plenty of things to do without having to copy documentation!). The programs available are on six discs as follows:

The Maths Pack

Patterns 1 & 2, Data Show, Size Game, Blocks, Teashop, Maths Talk, Halving, Diagram, Find Me, Boiled Eggs, Bounce.

Infant Programs 1

Jumbo, Paint, Find, Toyshop, Treasure Hunt, Puzzle Farm, The Lost Frog, Make an Adventure, Edit an Adventure, Play an Adventure.

Infant Programs 2

Ourselves, Our Graphs, Infant Tray, Create.

Language Pack 1

Storyline, Wordplay, Tins, Mallory, Eliza, Tracks.

Language Pack 2

Tray, Create

Problem Solving Pack

Raybox, Strategy, Colony, Bees.

The programs can be obtained from:

Les Watson,
Tulip Cottage, Church Corner,
Frampton on Severn,
Gloucestershire. GL2 7EQ

If you have had the programs and lost or corrupted them – here's you chance to get them again. If you've not seen them they are worth a look.

Each disc will cost £4.50 (which includes disc, documentation, and p&p.). Please make cheques payable to RMNUG.

Pascal Menu Program

RM User 18 contained an article entitled *Program Miscellany* which listed a number of interesting programs in a variety of languages. One program in particular caught my eye because it addressed a problem which I had been considering but had not yet attempted to solve. (Isn't it nice when someone else does the work!) My fourth year Computer Studies group are now using so many different packages that I wanted them to be able to select from a menu which one they wanted and so STARTS.BAT seemed to be exactly what I had been waiting for.

I typed out the listing, making some adjustments to take into account other software which we have like PAINTSPA Unfortunately I discovered that the MAKECOM program would not load some software including PAINTSPA, WORDSTAR and MULTIPLAN So it was back to the well known grindstone.

Clearly the program had to be a COM file, otherwise it would just not be fast enough on the thirteen station network. As the only compiler that I have is PASCAL I decided that it was time that I learned something about it. With a little research I discovered that PASCAL (TCL) has a chain command which can be used to load other software and so I started to write a program that would display a list, get a choice from the keyboard and then load the appropriate software.

After a number of attempts, getting the syntax correct and learning to use the compiler system, I finally arrived at a working program. It was then that I discovered that I could load nearly all the software that I wanted. I still cannot chain MULTIPLAN (any suggestions are very welcome.) but I can now load WORDSTAR and PAINTSPA.

I have GUARD installed on the school network and I decided that MULTIPLAN would have to go on a different password to get around this problem. So I included MULTIPLAN in the list of options in my menu program and if this option is selected the user is given the alternate password and then redirected back to the password prompt. Incidentally I also discovered that chain would not load GUARD and so the program chains CPNOS instead, thus rebooting the computer.

Having got this far I thought to myself, "Black and white is a little bit boring. Why don't I add some colour?". So out came the manuals again whilst I looked at high resolution graphics in PASCAL I found that the high resolution library is structured in a similar way to BASICSG2 ie: hplot instead of CALL"PLOT" etc. I then designed the background graphics in BASICSG2 using the facilities of an

interpretive language to try out colour changes and other adjustments as I felt fit. When I had got what I considered to be the final solution I then used WORDSTAR to change all the BASICSG2 syntax to PASCAL syntax eg: CALL"LINE", to hline(. This ensured that all my data was correct rather than retyping and making mistakes. I then tested out the graphics in PASCAL and when it worked to my satisfaction merged the two programs together to form one larger file.

The program listing is given below. This should be typed out, using a text editor or a wordprocessor (such as WORDDSTAR in non-document mode) and given a filename ending in .PAS. It can then be compiled by using two programs supplied with PASCAL (TCL). The first is called PAS.COM which is used to create an object file and the second is called LOCATE.COM which is used to create a COM file from the .OBJ file (created in stage one.).

Assuming that you have the PASCAL programs and your text file on the same drive and that the name of your text file is START.PAS then the procedure for compiling would be as follows:

(Anything that you type is in bold type)

```
A>PAS START

RML (TCL) Pascal compiler v 3.1A
Copyright (c) 1982 By Research Machines
Network version

START
program        0   0007

Compilation complete.
0 error(s)                -(Hopefully!)

A>LOCATE START

RML (TCL) Pascal locater v 3.1A
Copyright (c) 1982 By Research Machines
Network version

Locating:-
          - general library
          - hrg library
          - source

No errors.                -(Once again we hope.)
A>
```

If you get a directory of the disc you will find:

START.PAS
START.PRN
START.OBJ and START.COM

You need to keep START.PAS somewhere safe in case you wish to ammend it later or in case START.COM is corrupted at some later date. START.COM should now be copied into the user area where you want it and it is run like any other COM file by simply typing the name START on the command line.

```
program start(hrg);
const cls=\1F;
tab=\09;
var choice:integer;
begin
graph;scroll;
hgraph(hres,2);
hcolour(1,hmix(7,7,1));
hcolour(3,hmix(5,3,1));
hcolour(2,hmix(3,3,2));
hfill(0,0,320,192,2);
hfill(6,6,314,186,3);
hfill(212,144,304,180,1);
hfill(216,148,300,176,0);
hplot(220,172,1);
hline(226,152,1);
hline(232,172,1);
hplot(236,152,1);
hline(236,172,1);
hline(246,172,1);
hline(248,170,1);
hline(248,164,1);
hline(246,162,1);
hline(236,162,1);
hplot(264,156,1);
hline(264,154,1);
hline(262,152,1);
hline(254,152,1);
hline(252,154,1);
hline(252,170,1);
hline(254,172,1);
hline(262,172,1);
hline(264,170,1);
hline(264,168,1);
hplot(280,172,1);
hline(268,172,1);
hline(268,152,1);
hline(280,152,1);
hplot(268,162,1);
hline(280,162,1);
hplot(284,172,1);
hline(294,172,1);
hline(296,170,1);
hline(296,154,1);
hline(294,152,1);
hline(284,152,1);
hline(284,172,1);
page;
writeln(cls);
writeln('');
writeln('');
writeln('');
writeln(tab,'Computer Studies - 4th Year Option');
writeln(tab,'================');
writeln('');
writeln(tab,'1. SBASG2 Structured Basic Interpreter');
writeln(tab,'2. PAINTSPA Painting Program');
writeln(tab,'3. WRITE Wordprocessor');
writeln(tab,'4. MULTIPLAN Spreadsheet');
writeln(tab,'5. QUEST Database');
writeln(tab,'6. EDITOR used for creating QUEST files.');
writeln(tab,'7. DISPLAY Graphs from QUEST files.');
writeln(tab,'8. RELATE Relationships in QUEST files.');
writeln(tab,'9. FINISH Return to password.');
writeln('');
write(tab,'Choose option: ');
choice:=0;
while choice=0 do read(input,choice);
writeln('');
writeln(tab,'Loading ..........');
```

```
hgraph(hres,2);
case choice of
1: begin
writeln(tab,'C:SBASG2');
chain('C:SBASG2//');
end;
2: begin
writeln(tab,'D:PAINTSPA');
chain('D:PAINTSPA//');
end;
3: begin
writeln(tab,'A:WRITE');
chain('A:WRITE//');
end;
4: begin
writeln(tab,'Type in another password - DONALD');
chain('A:CPNOS//');
end;
5: begin
writeln(tab,'B:QUEST');
chain('B:QUEST-D//');
end;
6: begin
writeln(tab,'B:EDITOR');
chain('B:EDITOR//');
end;
7: begin
writeln(tab,'B:DSPLAY');
chain('B:DSPLAY//');
end;
8: begin
writeln(tab,'B:RELATE');
chain('B:RELATE//');
end;
9: begin
writeln(tab,'Goodbye!');
chain('A:CPNOS//');
end;
end;
end.
```

Micro Market

This is one of the many services offered by the User Group. If you have any RML equipment that you want to buy or sell, then why not try the Micro Market? RML's sound hardware will probably last for ever and should not suffer from being secondhand.

If you have secondhand equipment that you want to sell please write to the Secretary who will ensure that it is included in the list.

This list is now going to be prepared fresh for each issue of *Read Using* and there will be no items carried over from one issue to the next. This is because previous requests to notify the Secretary have been ignored with the result that some prospective purchasers have telephoned after equipment long since sold!

Please included your membership number with each Micro Market entry

List of equipment for sale or wanted – January 1987

For Sale:

380Z,56K,HRG, 40char,dual drive,s/d
12″ mono monitor.

£400 or offers to:

P.J. Ayre, East Suffolk 6th Form College,
Church Lane, Gorleston, Gt Yarmouth NR31 7BQ

* * *

480Z (black case), V1.1, 64K, L2 graphics
Offers of around £250. Might be able to deliver in South and Eastern England. Contact:

Roger Holgate at 15, Chandonsbury Road, Burgess Hill, West Sussex. RH15 9EX Tel: (04446) 41143

* * *

Mint condition 380Z, 56K, twin d/s drives, CP/M 1.4b; COS 3.4b; SIO4; BASIC; TXED; ZASM and all documentation.

Contact: Peter Folgelman on (0734) 854845 daytime (0734) 884339 evening

* * *

* * * Remember * * *

Deadline for next issue is **February 28th**

Membership Form

Membership of the User Group is by annual subscription. This currently stands at £15 and at the moment the membership year runs from 1st April 1986 to 31st March 1987. We intend to move to a rolling scheme from 1st April, 1987 whereby membership is valid for 12 months from the date of joining.

If you join after February 1st 1987, your membership will be assumed to have started from April 1st as we are out of print already of one issue published during the current membership year and could not, therefore, undertake to supply you with all the issues for the current membership year. Back numbers are available for purchase.

Payment should be buy cheque, company purchase order or LEA order. Please state clearly to whom the Journal should be sent and **print** the name and address.

Name: .....

Institution/Organisation: .....

Address: .....

.....

.....

Cheque/Order for £15 enclosed (Delete as appropriate)
(Payable to **RMNUG**)

Is this a renewal? Yes/No (Delete as appropriate)

If Yes, *please put membership number* .....

Forms and payment should be sent to:

The Membership Secretary,
RM User Group,
c/o
3, Loseberry Road,
Claygate, Esher, Surrey.

The RM User Group can be contacted on: BT GOLD **72:MAG90380**
PRESTEL **8804936**

Advertising

We accept advertisements for **RM User**. The charges below assume that camera-ready (black & white) artwork is supplied. Any advertisements typeset by **RM User** are charged at cost. **RM User** is an A5 format Journal and advertisments are accepted at the Editor's discretion.

Full Page: **£50**
Half Page: **£30** Quarter Page: **£18**

The *copy deadline* for the next issue is: **28th February, 1987**

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OK.....we admit it, the caption is a bit over the top, but hands up all of you who have had dealings with RML at Oxford. Well, those of you with your hands up will know what nice people they are. MSM knows what nice people they are because we have dealings with them every day. So, who is MSM? We are Micro System Maintenance Ltd., RML's authorised national service agents. Our staff have been associated with RML since their earliest days, and whilst modesty forbids us to say that we know them intimately, we will readily admit to being intimate with the insides of those clever machines that they make. If your 380Z, 480Z or Nimbus needs attention, we'll fix it for you, and we won't charge you the earth. If you are responsible for keeping networks up and running, talk to us about a maintenance contract; our quotation will pleasantly surprise your financial manager.

We are the only company authorized to do warranty work, and we also carry out upgrades and modifications, either on-site or at one of our regional service centres.

Contact us at:

MSM Service Desk
c/o Research Machines Ltd.
Mill Street,
Oxford.
OX2 0BW.
Telephone (0865) 249866

(Please mention 'Read Using')
We'll send you an information pack and/or a quotation

MICRO SYSTEM MAINTENANCE LTD., WESTLEA, SWINDON, WILTS. TEL: 0793-616888